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EXAMINER

WILLETT, STEPHAN F

| ART UNIT | PAPER NUMBER |
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2142

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Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

MAILED

Application Number: 09/409,305
Filing Date: September 29, 1999
Appellant(s): ULLMAN ET AL.

MAY 31 2005

Technology Center 2100

James Denaro
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 3/8/05.

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(1) *Real Party in Interest*

Examiner agrees with the statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

Examiner agrees with the statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

Examiner agrees with the statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

Examiner agrees with the appellant's statement of the status of amendments after final rejection contained in the brief is correct. However, the Examiner would like to highlight the claims were "substantively" rewritten in an amendment filed 5/17/04 and the last element claiming "used to enhance an audio video program" was added.

(5) *Summary of Invention*

Examiner agrees with the summary of invention contained in the brief is correct.

(6) Issues

Examiner agrees with the appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Examiner agrees with the appellant's grouping of the claims.

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

| | | |
|-----------|-----------------|---------|
| 5,878,223 | Becker et al. | 03-1999 |
| 6,327,574 | Kramer et al | 12-2001 |
| 6,012,083 | Savitzky et al. | 01-2000 |

(10) Grounds of Rejection

Claim Rejections - 35 USC, 103

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103 and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 149-150, 158-161, 164-166, 169-170, 175-176 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker et al. with Patent Number 5,878,223 in view of Kramer et al. with Patent Number 6,327,574.

3. Regarding claim(s) 149, 158, 164, 170, 175, Becker teaches a page finder correlated based on user profiles. Becker teaches using profiles to determine the content to send to a user, col. 4, 5, lines 54-57, 1-4 and as the table becomes more useful, i.e. reflective of usage patterns [these are user usage patterns and are a user profile], the more the systems are used, col. 9, lines 8-10 or based on current usage or inheritance, col. 9, lines 59-60, and a unique user, col. 11, lines 11-12, 18-20, col. 10, lines 48-51. Becker teaches a network to transmit content to machines, col. 4, lines 13-18. Becker teaches inheritance of user profile attributes into the user profile from a

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group in which the user is a member as "values may be weighted by various categories ... the system can create and update a separate probability table for each category [group] to be used, col. 10, lines 47-64. Becker teaches fields to specify machine ids, and a machine address, col. 5, lines 18-21 as standard handshaking that will clearly have a user's machine address so the server can direct predicted information to a user/client. Becker teaches a hierarchical attribute value pair type data structure that can be called a donut which is simply defined as a data structure, col. 9, lines 1-10 that is dynamic and changes as different data is selected by a user as further taught by each row in the table is associated with a particular currently-active page, col. 9, lines 13-14. Each entry in the table represents a historical probability col. 9, lines 14-15 that is independent of the particular pages that a particular user selects. Becker teaches comparing the above profile with a second type data structure to determine whether to transmit content to the machine, but not the user as comparing to chose the data with the highest probability, col. 9, lines 38-40. Becker teaches a TV and its related communication requirements, col. 3, lines 57-58 and col. 5, lines 4-9 and 18-23, and including "audio", col. 3, line 51 and "video", col. 1, line 26. Becker teaches the invention in the above claim(s) except for explicitly teaching a hierarchical attribute value pair data structure . In that Becker operates to generate user based documents, the artisan would have looked to the network data structure arts for details of implementing user matching. In that art, Kramer a related network system, teaches "the consumer profile includes hierarchical attribute vectors which encode attributes of a consumer at progressively higher levels of abstraction", abstract, lines 14-16. Kramer

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specifically teaches "annotating or replacing ... other media with (possibly) related multimedia content", col. 6, lines 22-24 and "the characteristic value for an object will be represented as a vector [hierarchy]", etc., col. 11, lines 1-5. Further, Kramer suggests the "TIC to construct the personal database and models of the consumer", col. 5, lines 31-32 which will result from implementing his hierarchical attribute value (HAV) pair type data structures. The motivation to incorporate specifically a HAV insures highly related multimedia data is matched with a user. Thus, it would have been obvious to one of ordinary skill in the art to incorporate said data structures as taught in Kramer into network system described in Becker because Becker operates with finding data in a computer network related to a user and Kramer suggests that better matching techniques can be obtained in networks. Therefore, by the above rational, the above claims are rejected.

4. Regarding claim(s) 150, 159, 169, 176, Becker teaches using an "object", col. 7, lines 23-26.

5. Regarding claim(s) 160-161, 165-166, Becker teaches storing data structures in memory, col. 6, lines , col. 10, lines 3-5.

6. Claims 151-157, 162, 163, 167, 168, 171-174, 177-183 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker et al. with Patent Number 5,878,223 in view of Kramer et al. with Patent Number 6,327,574 and Savitzky et al. with Patent Number 6,012,083.

7. Regarding claim(s) 151, 162, 167, 177, Becker teaches a page finder correlated based on user profiles. Becker teaches a network to transmit content to machines, col.

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4, lines 13-18. Becker teaches fields to specify machine ids, and a machine address, col. 5, lines 18-21 as standard handshaking that will clearly have a user's machine address so the server can direct predicted information to a user/client. Becker teaches using profiles to determine the content to send to a user, col. 4, 5, lines 54-57, 1-4 and as the table becomes more useful, i.e. reflective of usage patterns [these are user usage patterns and are a user profile], the more the systems are used, col. 9, lines 8-10 or based on current usage or inheritance, col. 9, lines 59-60, and a unique user, col. 11, lines 11-12, 18-20, col. 10, lines 48-51. Becker teaches a hierarchical attribute value pair type data structure that can be called a donut which is simply defined as a data structure, col. 9, lines 1-10 that is dynamic and changes as different data is selected by a user as further taught by each row in the table is associated with a particular currently-active page, col. 9, lines 13-14. Each entry in the table represents a historical probability col. 9, lines 14-15 that is independent of the particular pages that a particular user selects. Becker teaches comparing the above profile with a second type data structure to determine whether to transmit content to the machine, but not the user as comparing to chose the data with the highest probability, col. 9, lines 38-40. Becker teaches a TV and its related communication requirements, col. 3, lines 57-58 and col. 5, lines 4-9 and 18-23, and including "audio", col. 3, line 51 and "video", col. 1, line 26. Kramer specifically teaches "annotating or replacing ... other media with (possibly) related multimedia content", col. 6, lines 22-24 and "the characteristic value for an object will be represented as a vector [hierarchy]", etc., col. 11, lines 1-5. Becker-Kramer teaches the invention in the above claim(s) except for explicitly teaching details

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that makeup a user-profile. In that Becker operates to generate user based documents, the artisan would have looked to the network arts for details of implementing user selections. In that art, Savitzky, a related network system, teaches "a web server to transform the requests from the Web client", abstract, lines 2-3. Savitzky specifically teaches that a "feature calculator generates a feature list for a transaction by scanning the data element", col. 6, lines 37-39 based on the user's requests, "additional features can be added at any time to the features calculator's known features", col. 6, lines 53-54 to highlight the data is independent of the calculated hierarchy, and an agent "modifies them according to filtering rules before documents are returned to a client", col. 11, lines 32-34 which also reads on a hierarchical attribute value data pair data structure .

Further, Savitzky suggests that "the user typically accesses agency 10 by some action taken with a Web client to access to a Web server", col. 5, lines 1-3 will result from implementing his network system. The motivation to incorporate a user profile insures highly related documents are matched with a user. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the user profile as taught in Savitzky into network system described in Becker because Becker operates with finding documents in a computer network and Savitzky suggests that optimization can be obtained with networks. Therefore, by the above rational, the above claims are rejected.

8. Regarding claims 152-153, 179, Savitzky teaches attributes of a user, col. 6, lines 55-60 and preferences of a user, col. 11, lines 29-30 with relevant hierarchies, col. 20, lines 65-66 via update queries, col. 21, lines 8-9, but Becker clearly queries users, col. 5, lines 13-15. Thus, the above claim limitations are obvious in view of the

combination.

9. Regarding claims 156, 163, 168, 180, 182, Savitzky teaches the medium to include chat rooms, users, or services as the various type of agent services available, col. 6, lines 65-66. Thus, the above claim limitations are obvious in view of the combination.

10. Regarding claims 157, 183, Becker teaches a TV and its related communication requirements, col. 3, lines 57-58 and col. 5, lines 4-9 and 18-23, and even "audio", col. 3, line 51. Thus, the above claim limitations are obvious in view of the combination.

11. Regarding claims 154, 171-174, Becker teaches transmitting selected information, col. 5, lines 50-53. Thus, the above claim limitations are obvious in view of the combination.

12. Regarding claims 155, 178, 181, Savitzky teaches monitoring the activities of a user, col. 11, lines 28-29 and Becker teaches dynamically updating user profiles, col. 9, lines 24-25. Thus, the above claim limitations are obvious in view of the combination. col. 9, lines 13-14 in Becker.

(11) Response to Argument

1. Applicant argues "none of the references relied upon are directly relevant to the invention", Paper dated 3/8/05, Page 3, line 16. The applicant is arguably correct, however, the above argument is not commensurate with what is presently claimed and therefore will not be considered at this time. The applicant summarized the invention as a system "for updating a user profile of a user who experiences an audio video program", Paper dated 3/8/05, Page 2, line 11-12 while Becker teaches "a most likely

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predicted-to-be selected page of information”, abstract while claim 1 added the element “content is selected” and “is used to enhance an audio video program”, Paper dated 5/17/04, Page 8, lines 22, 25. Becker teaches user profile data is used to select web page data including “audio”, col. 3, line 51 and “video”, col. 1, line 26 selections. In the rejection dated 9/8/04 it was suggested in an effort to further prosecution and since the attributes of “hierarchical attribute value-pair data [and] structure[s]” as claimed is broad and has been argued, further non-obvious elements that makeup this data and structures is suggested. Similarly, the below argued “hierarchical attribute-value pair data structure” was originally claimed as a “donut”, “crumbs” and “sub-donuts”, Paper dated 3/8/05, Page 2, lines 17-20. An applicant can be their own lexicographer, however such definitions must be reasonable, provided in the specification and be understood at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Lastly, the claimed “method “ in claim 1 with “fields within a computer-readable medium” is arguably a method claim. Thus, Applicant’s arguments can not be held as persuasive regarding patentability.

2. Applicant argues “inheritance of user profile attributes into the user profile from a group in which the user is a member ”, Paper dated 5/17/04, Page 8, lines 22, 25 and again in Paper dated 3/8/05, Page 4, lines 3-4 is not taught. However, Becker teaches “values may be weighted by various categories ... the system can create and update a separate probability table for each category [group] to be used”, col. 10, lines 47-64. For example, an “entire subscriber database” [group] inherits the attribute to be able to

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view or not view pornography. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

3. Applicant had suggested "the probabilities in the 'prediction tables' are essentially user-profile information", Paper No. 21, Page 20, line 17 and "the individual value pairs may be shared by different data structure hierarchies to define different entities, e.g. an individual or a group of individuals sharing the same piece of information", Paper No. 11, page 9, lines 1-2 and "none of the references disclose ... a hierarchical attribute value-pair", Paper dated 5/17/04, Page 8, line 22. Correct and this is only one of many profile type information. Ironically, the group of ratings for a particular page "share the same piece of information" and use it independently depending on the user's current page selection. A user profile could be as simple as a "currently-active page", col. 9, lines 13-14 in Becker. Also, Savitzky teaches an agent "modifies them according to filtering rules before documents are returned to a client", col. 11, lines 32-34. Said rules read on an even more advanced dynamic "hierarchical attribute value pair data structure" as claimed. Also, "additional features can be added at any time to the calculator's known features", Savitzky, col. 6, lines 53-54. Applicant suggests "features are added to the feature calculator and not to the feature list", Paper No. 21, Page 25, lines 10-11. Such a limited interpretation is not reasonable based on the teachings since either feature data structure can be used as the user's profile based on the particular user's transaction being resolved. A transaction is directly related to a user. Lastly, applicant argues "this portion of Becker discloses merely that a value in the table can be set for a plurality of subscribers", Paper dated 3/8/05, Page 4, lines 18-19.

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Correct, thus the "value" of the group is inherited by the user or in the user's profile.

Note, above applicant contradictedly argued "the probabilities in the 'prediction tables' are essentially user-profile information", Paper No. 21, Page 20, line 17. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

4. Applicant had suggested "Becker does not teach a system that finds pages based upon a user profile", Paper No. 17, Page 7, lines 11-12. "User profile" is another broad term that is taught in all three references, see Becker, a unique user, col. 11, lines 11-12, 18-20; Kramer, consumer profiles, abstract, line 8 that are clearly shared over a network; Savitzky's "user's interests", col. 11, lines 28-29 and a user's conduct in Table 2 qualifies as part of a user profile. Applicant now argues "the categories of Becker (time, age [sic] of user browsing the web, statistics about users and income level) are nothing more than a collection of parameters and do not teach a group of which a user is a member", Paper dated 3/8/05, Page 4, lines 25-27. Clearly, the applicant and the Examiner have "substantively" different interpretations of this element. The Examiner asserts based on the user's age the user is clearly of member of said age group. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

5. Applicant argues "a group of subscribers, i.e. people, cannot inherit and store profile attributes as those terms are used in this application", Paper dated 3/8/05, Page 5, lines 16-17 apparently due to the applicant's "abstract group", id., line 12 argument. First, the pornography attribute was just one example. Thus, the portions, or other examples, have already been identified by the Applicant in Becker as "time, age [sic] of

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user browsing the web, statistics about users and income level". These attributes about a user are stored and based on these attributes and generalizations about the group that that the user is a member that has these attributes, content is selected based on how "those terms are used in this application". In addition, attributes inherited are inherent in the group that the user is a member, and not at face value but even a probability of the attribute's value is computed based on other user attributes. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

1. Applicant had suggested "the hierarchical attribute value data pair data structure is quite different from other data structures, as is apparent from the many advantages ... the attribute value pair is independent of the hierarchical structure", Paper No. 8, Page 3, lines 2-3 and "the individual value pairs may be shared by different data structure hierarchies to define different entities, e.g. an individual or a group of individuals sharing the same piece of information", Paper No. 11, page 9, lines 1-2. But no further explanation or elements in the claims involving this element was provided and the Examiner stated the above argument is not commensurate with what is presently claimed and therefore will not be considered at this time since the claims do not state "independent". The presently claimed data structure is indistinguishable from a relational database with related pairs of data where different data pairs have varying importance or a dynamic relational database created by an agent via a calculation or filter which is taught as an agent "modifies them according to filtering rules before documents are returned to a client", col. 11, lines 32-34 in Savitzky. Obviously the data is independent of the hierarchical structure even though said data can also have a

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relation to the hierarchical attribute value pair data structure. In any event, "appellant submits that Kramer does not teach a value-pair data structure", Paper dated 3/8/05, Page 6, line 12. Applicant admits the vector "is simply a one-dimensional array", id., line 14-15, thus Kramer teaches a vector having an infinite, $x(n)$ number of values, not just a pair or two values as claimed. Also, Kramer is not limited to a vector as suggested since the "scalars $a_1, a_2, \dots, a(n)$ ", col. 22, line 29 in Kramer really make up an array, a more inclusive and complicated data structure, not just a vector. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

1. Thus, the prior art, as applied, fully suggest and teaches the limitations disclosed and claimed by the Appellant and Appellant's arguments cannot be held persuasive regarding patentability with regard to these limitations.

2. For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Patent Examiner

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5/14/2005



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Kenneth Coulter

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